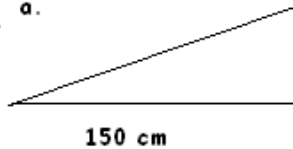
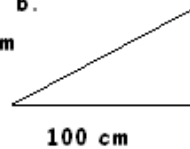


1. Which of these ramps is the steepest?
Be ready to justify your answer.

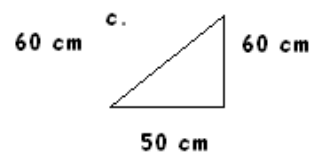
a.



b.



c.



The slope of a line is a measure of a line's steepness.

The formula for slope is

Where m is the symbol for slope.

$$m = \frac{\text{rise}}{\text{run}}$$

2. Find the slope of each of the ramps in question 1 to prove this formula works.

a.

b.

c.

3. Find the slope of each of the following line segments.

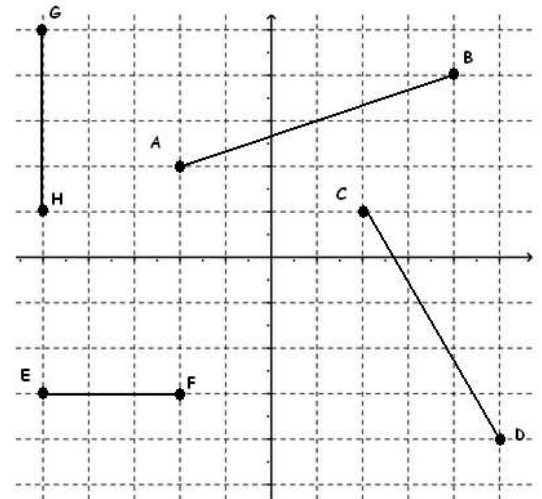
Remember: **Lines sloping up to right = positive**
Lines sloping down to the right = negative

$$m_{AB} =$$

$$m_{CD} =$$

$$m_{EF} =$$

$$m_{GH} =$$

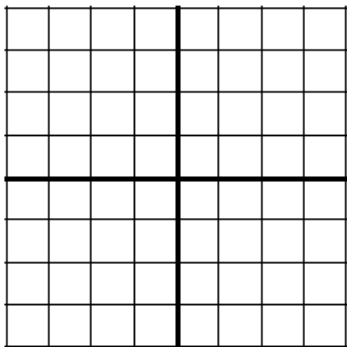


4. What if you were asked to find the slope of line segment AB with the same end points as above A(-2, 2) and B(4, 4) without graphing. Is there a formula you could create?

5. Try your formula for all lines segments in question 3 to see if it works.

6. A line segment has an endpoint of A(-3, 3) and a slope $m = \frac{-4}{5}$, what is its other endpoint?

Graphically:



Algebraically: